

tion of this one fact alone will save many dollars in road metal. If put on at the proper time a larger aggregate can be used, resulting in a sturdier road. If the surface is not in the proper condition to receive a larger aggregate it will roll around on top and be very objectionable.

The principle of dragging and planing is so well known among all road men I am purposely omitting any further mention of it. *The best way to have a smooth stone road is to keep it smooth.* Once a stone road surface gets rough it is difficult to get it back in good condition. Great care should be taken that all stone surfaces go into the summer in a smooth condition. During the summer months a stone surface gets almost like concrete in hardness and a drag or maintainer can not have the smoothing action it would have on a gravel road. A stone surface is not so subject to "chatter bumps" as is a gravel road. This is one of its advantages.

While having many good qualities, the stone surface has some objectionable features. In summer the dust is very objectionable, both to the travelers' comfort and safety, and to the people living along the road. The farmer's crops, especially his forage crops, adjacent to the road are practically ruined if a rain does not immediately precede his harvest. The dust will penetrate into the houses and cause housekeepers much annoyance.

In conclusion, remember that stone can make an excellent road if properly selected, applied and manipulated. Have clearly in mind what you want when selecting your quarry, the condition of your road when applying the metal and forecast the season's demands when manipulating it. A stone road going into the summer as a smooth road is more likely to stay smooth. Finally if a road is smooth, as far as the traveling public is concerned, many other defects are readily forgiven.

## REPORT OF NOBLE COUNTY HIGHWAY DEPARTMENT (1927)

By M. L. Latta,  
Superintendent.

### Types of Roads

Gravel .....	212.61 miles
Gravel and Concrete.....	12.17 miles
Concrete .....	26.64 miles
Brick .....	2.03 miles
Stone .....	6.02 miles
Total .....	259.47 miles

Gravel used during year 1927.....		33,387 yards
3.75 miles of construction.....	8,926	
28.94 miles of resurfacing.....	20,661	
Patching .....	3,800	
Yards of gravel hauled with county trucks.....		31,303 yards
Yards of gravel hauled by hired trucks.....		1,919 yards
Yards of gravel hauled with teams by maintainers.....		165 yards

**Expense of Graveling**

Gravel, dragline rental, gasoline, oil and wages.....	\$16,943.26
Labor in gravel pits, including operation of dragline and crusher .....	4,508.74
Repairing and cost of new parts on pit equipment.....	1,941.95
Repairing Ford trucks and new parts.....	3,567.35
Repairing Ford trucks at county garage.....	557.31
Repairing Noble trucks and new parts.....	971.83
Repairing Noble trucks at county garage.....	278.65
Insurance on trucks.....	618.00
Storage for trucks.....	50.00
Office supplies .....	18.90
Miscellaneous labor .....	345.18
Miscellaneous supplies .....	73.78
M. L. Latta .....	2,566.37
<b>Total .....</b>	<b>\$32,702.84</b>
Average cost per yd. when hauled by county trucks.....	\$.105

**Construction**

Miles of road constructed in 1927.....	3.75
Yards of gravel hauled by county trucks—7,007@1.05.....	\$7,357.62
Yards of gravel hauled by hired trucks—1,919.....	2,023.35
<b>Total .....</b>	<b>\$9,380.97</b>
Average cost per mile—\$2,501.58.	

**Resurfacing**

Miles of road resurfaced.....	28.94
Yards of gravel used—20,661@1.05.....	\$21,694.05
Average cost per mile—\$746.13.	

**Maintenance**

Grading, dragging, mowing, tarring, removing snow and patching.	
Labor, gasoline, oil.....	\$7,546.73
Noble truck repairs.....	971.83
Insurance on trucks.....	300.95
Repairing trucks at county garage.....	278.65
Graders and drags.....	413.35
Tarvia .....	658.41
Preparation at garage (Tarvia).....	69.10
Lumber .....	400.00
Paint .....	120.00
Miscellaneous supplies .....	73.78
Miscellaneous labor .....	345.18
Office supplies .....	18.90

M. L. Latta .....	2,566.37
Patching—3,635 cu. yds. @ 1.05.....	3,816.48
Total .....	\$17,579.73
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Actual maintenance, average cost per mile, \$68.22.	
Total maintenance including resurfacing, \$151.56 per mile.	
Grand Total .....	\$48,654.75

## REPLY TO ADDRESS OF WELCOME

By Matt Foster,  
President, County Highway Superintendents' Association,  
Evansville, Ind.

For the past nine years I have been a regular attendant at the Annual Road School and will say that each year has shown improvement in the quality of the program offered. The school is growing rapidly in numbers also and we "old timers" are proud of the small contribution which we have been able to make towards the success of this annual affair.

I feel that Purdue University is rendering a great service to the state through this annual gathering of men interested in roads and streets. A great deal of the improvement that has come about on Indiana roads in the past few years can be attributed to the influence of this Road School, and the highway extension work under the auspices of the Purdue Engineering Extension Department. We road men of the state enjoy a great privilege in listening to these speakers of both local and national reputation on various subjects pertaining to our road work. In addition to this we have the opportunity of meeting men from all parts of the state engaged in the same kind of work which we are endeavoring to carry on. This gives us the opportunity of exchanging ideas with these men and in this way we pick up many helpful ideas that help us out in our own county work.

I understand that there have been a few cases where county officials refuse to attend the Road School because they felt that they could learn nothing from a program of this kind. I would like to say that any man who spends a week at one of these Road Schools without learning anything that will improve his ability and make it possible for him to do more economical work in his own home county is not fit to hold a county office.

It is not possible for us to take satisfactory notes on the different subjects presented during the week but Purdue has performed another real service to the road men of Indiana by